



SIERRA CLUB

Connecticut Chapter
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Dear Senator Needleman, Representative Arconti, Senator Winfield, Representative Allie-Brennan, Senator Formica, Representative Ferraro and members of the Energy and Technology Committee,

On behalf of the Sierra Club and our more than 40,000 members and supporters in Connecticut, thank you for the opportunity to testify on several issues before you today.

The Sierra Club is committed to defending everyone's right to a healthy world by tackling the serious challenges of a warming climate and unprecedented levels of pollution. Though Connecticut's Global Warming Solutions Act requires a reduction of greenhouse gas emissions below 2001 levels by 45% by 2030 and 80% by 2050 in alignment with climate science, DEEP's latest greenhouse gas inventory shows that we are not on track to meet these goals. We must do much, much more than has been done to date.

SB 277 An Act Concerning a Trash-to-Energy Working Group

Sierra Club supports SB 277, with some recommended changes. It is important to study and plan for how to achieve equitable and environmentally just solutions to Connecticut's waste crisis as the MIRA trash incinerator closes and Connecticut's four other incinerators age.

Incineration is the most polluting way to manage waste or to make energy – dirtier than coal burning, and worse than direct use of landfills.¹ Incinerators release dangerous levels of toxic pollutants like dioxins, mercury, lead, acid gasses, nitrogen oxides, sulfur dioxides, and particulate matter. They leave behind toxic ash, which must be landfilled.

Connecticut residents who live within 25 miles of a trash incinerator are disproportionately black and Latinx. Together, the Hartford and Bridgeport incinerators account for 76% of the state's trash incineration capacity, along with 78% of the lead emissions and two-thirds of the mercury and nitrogen oxide emissions from the state's trash incinerators.



For these reasons, Sierra Club seeks the adoption of Zero Waste Hierarchy, shown on the image to the right, before we turn to waste management practices like incineration.

One of the strongest and most effective ways to reduce waste is to ban single use plastics, including packaging, bags, and other products like polystyrene and plastic food service ware, and to strengthen recycling and composting programs.

The Committee should consider whether a Working Group is needed after the work already done over the

¹ www.energyjustice.net/files/incineration/incineration_vs_landfills.pdf and www.energyjustice.net/incineration/

past several years by CCSMM, the Hartford Solid Waste Task Force, and DEEP. The legislature could instead implement the recommendations made by CCSMM after its working groups addressed these issues inclusively, with input from over 80 municipalities. Should you move forward with a Working Group, it should build on the work done by CCSMM, the Hartford Solid Waste Task Force, and DEEP.

It is also important to be more inclusive in appointing the Working Group. It should include community representatives in addition to municipal leaders. Environmental justice (EJ) communities who are most directly impacted by the polluting facilities and practices should have predominant seats on the Working Group. EJ communities should be able, through open and transparent processes to elect representatives to represent their community, and ample opportunity for public input must be required.

The composition of the Working Group should include independent, non-industry experts in waste management and waste reduction. Since waste management issues impact human health and the environment, any Working Group should also have health and environmental scientists representing those concerns.

Please note that the Environment committee has raised a similar bill, HB 5298.

House Bill 5325 An Act Requiring the Commissioner of Energy and Environmental Protection to Make Recommendations Regarding Hydropower

Regarding House Bill 5325, the Sierra Club wishes to provide some context regarding hydropower to inform the Committee as you consider this bill.

Hydropower is considered a form of clean energy by some because it does not rely on fossil fuels. However large hydropower projects entail significant costs both ecologically and in terms of environmental justice.

- **Methane:** Damming a river entails the submersion of organic material. This decomposing organic material releases methane, which is a potent greenhouse gas, much more powerful than carbon dioxide. Researchers at Washington State University found that methane emissions were approximately 25% higher than previously thought.²
- **Habitat:** Damming rivers permanently disrupts the balance of ecosystems, displacing people and animals by destroying the environment they had depended on for thousands of years. Hydro Quebec has resettled thousands of First Nation communities and devastated their traditional fishing and hunting grounds.
- **Coastal Erosion:** Rivers and streams typically carry sediments downstream, ultimately depositing them on ocean and lake shores. Dams and reservoirs built along rivers are an interruption to this flow, trapping huge amounts of river sediment--in the case of larger dams, up to 100% of it. Subsequently, the sediment is unable to be deposited along riverbeds and shorelines, leading to massive amounts of coastal erosion.
- **Marine Life:** Fish get drawn into turbines, suffer increased predation due to altered habitats, and have been shown to suffer from stress and be injured passing through dams. Also, reservoirs

² <https://www.thedailyworld.com/northwest/hydropower-isnt-carbon-neutral-after-all-wsu-researchers-say/>

cultivate excess algae and weeds, crowding out other species. Reservoirs are also lower in dissolved oxygen, which can lead to some parts of the water being unlivable. The impact on aquatic ecosystems has been demonstrated in Maine, where ever since the removal of the Great Works Dam in 2012 and the Veazie Dam in 2013 the number of salmon and other fish tripled from the previous year with the dam.

- Large-scale Hydro's Impact on People: Lands that have been submerged by large scale dams in Canada were occupied by First Nations people in Canada for millennia. Indigenous groups have spoken out many times about hydroelectric projects.³
- New Transmission Line Proposals: Delivery of much larger quantities of Canadian hydropower would require a new high voltage line. The project first chosen to meet this need was referred to as "The Northern Pass," proposed to run through New Hampshire. The Northern Pass Project was fiercely opposed by a wide range of organizations in New Hampshire and Massachusetts, including the Appalachian Mountain Club, many local Chambers of Commerce, recreational groups, as well as the Sierra Club. After much deliberation and advocacy, a key permit to allow this project was rejected by the New Hampshire Site Evaluation Committee. This led project proponents to seek option number two - the controversial "New England Clean Energy Connect," instead proposed to run through Maine. The Sierra Club remains opposed to this project.

Small-scale hydroelectric projects can produce power from water stored behind a dam for regulated flow, use the natural streamflow without an impoundment ("run of river"), or divert the flow through a pipe or canal. Microhydro is generally considered to be up to 100 kilowatts of capacity, and small hydro is up to 10 megawatts. There is a modest amount of potential to generate electricity by adding hydropower to existing dams. Where this is feasible and the existing dams are not problematic or likely to be removed soon, the Sierra Club supports these developments with the following conditions.

- While significant numbers of sites could be developed for small-scale hydro, each site must be considered for its local and cumulative effects on water quantity and quality, minimum streamflow, habitat, and fish passage. All installations must provide full mitigation for any detrimental effects. Some stream segments should not be developed at all in order to preserve the benefits of free-flowing rivers.
- The Sierra Club opposes installations in stream segments proposed for listing as federal or state Wild and Scenic Rivers or in roadless areas.
- The Sierra Club generally does not support small-scale hydro development requiring new dams and impoundments.
- Retrofit of existing dams that are unlikely to be removed may be appropriate provided river impacts are minimized and both upstream and downstream fish passage addressed. Run-of-river and channel diversion projects must minimize river impacts and provide fish screening, and minimum streamflows must be maintained in the natural channel.

³<https://www.bowdoin.edu/arctic-museum/news/2020/indigenous-communities-speak-out-on-new-england-clean-energy-connect-cmp-corridor-and-related-hydroelectric-projects.html>

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Thank you for your consideration of our testimony.

Sincerely,

Samantha Dynowski, State Director
Sierra Club Connecticut